

# Research on the Consumption and Development of Film Spin-offs under the Fan Economy——Take "The Wandering Earth 2" as an Example

Wang Tingjie

School of Economics and Management, China University of Geosciences, China

Corresponding author E-mail: 15072477532@163.com

**Abstract:** Based on the fan economy and transmedia storytelling theory, this paper takes "The Wandering Earth 2" as the research object, and uses the research method of questionnaire survey to grasp the problems and enlightenment in the current consumption and development process of film spin-offs. Through questionnaire survey, it is found that fans' recognition and liking of spin-offs will affect their purchase intention, while the degree of restoration and value proximity of movie spin-offs will affect the recognition and love of fans. At the same time, it is found that there are a variety of problems in the transformation process from film content to spin-offs, and enlightenment is obtained for the problems: film content spin-offs should convey the core value of films, restore the image in the movie, develop spin-offs before the planning stage of the film, maximize publicity to ensure the smooth flow of information and sales channels, and focus on emotional connection with fans.

**Keywords:** movie spin-offs, fan economy, transmedia storytelling, The Wandering Earth 2, industry chain

## 1 Introduction

The development of film spin-offs is the result of the integration of the film industry and the real industry. And the strategic logic of transmedia narrative is an important way for the film industry to extend the industrial chain and promote value added. In the 2023 Spring Festival movies, the box office of "The Wandering Earth 2" exceeded the 4 billion, and at the same time, this also drove the hot sales of movie spin-offs, such as mechanical dog Benben, artificial intelligence MOSS, door frame robot, XCMG excavator, the digital life USB flash drive and other characters or item models appearing in the film. According to data released by SCIFI Space, the official licensee of "The Wandering Earth 2", the crowdfunding amount of this series of products reached 117 million yuan in one month, with 510,000 participants, creating the highest record for crowdfunding of film and television content spin-offs in China. However, on March 14, the digital life USB flash drive sample photos released by SCIFI Space were questioned by fans. After comparing the difference in materials and parameters between the samples released and those announced when the crowdfunding campaign was launched, netizens believe that the producers have "cut corners" and have been "calling out" for an official refund channel. In this regard, we are curious why the content spin-offs of "The Wandering Earth 2" are so popular. In the process of promoting the development of content spin-offs, how should we maximize the value of spin-offs? These are the questions that this article focuses on.

## 2 Literature Review

## 2.1 A review of research on film spin-offs

Film spin-offs have become a major source of income for film companies in the United States, where the film industry is very developed. American scholars Lubbers and Adams believe that when the cost of film production and marketing becomes expensive, studios will turn to film spin-offs and making promotion more frequently. Jason agrees that film spin-offs may prove to be a creative and fascinating source of risk protection. Regarding marketing, scholars Sangkil and Reo believe that the success of American film spin-offs depends on the characteristics of films and the market economic environment, so sales and revenue success can only be achieved if the national culture matches the content of imported cultural products.

The development of China's film spin-offs industry is still in the exploratory stage, and the research of domestic scholars on film spin-offs mainly focuses on the value of spin-offs, as well as the development and marketing of spin-offs. Si Ruo and Zhao Lu in *From Symbol to Simulation: An Exploration of the Value of Chinese Mythological Animation Film Spin-offs* argue that the value of film spin-offs focuses on simulacra—satisfying consumers' cultural imagination and catering to their psychological needs to dissolve linear time and transfer life anxiety. Pei Jingyu pointed out in *Analysis of the Industry Status and Development Model of Film Spin-offs in China* that in order to truly treat film spin-offs as an important part of the film industry, the design structure of spin-offs should be considered at the early stage of script creation, and marketing preparations should be made after release, that is, film spin-offs should develop at the same time as the film itself. Ding Yaoyao defined film spin-offs as "licensed goods with film as the core" in *From Traffic Products to Spiritual Products: A Study on the Enhancement of the Core Competitiveness of Chinese Film Spin-offs*, and believed that film spin-offs are spiritual products attached to the spiritual core of films, which can be freely circulated and traded, and play the role of global "film currency". From this point of view, film spin-offs are products under the integration of the film industry and the real industry, and the important thing is the spiritual core contained in the product.

## 2.2 A review of research on transmedia storytelling

Transmedia storytelling was first proposed by Henry Jenkins, who believed that transmedia storytelling represents a process in which the constituent elements of a work are systematically dispersed across multiple media channels to systematically create a unified and coordinated entertainment experience. Kan Qian and Fu Wenya (2017) argue in *Research on Transmedia Narrative in the Context of Media Convergence: Starting from the Content Production of Audience Participation in Internet Intellectual Property Rights* that audience participation in the production of content text is an innovation in the current content production mode, and this innovation promotes the development of transmedia narrative. Zhu Guangming (2020) believes that transmedia narrative has two paths: role-centered and story-centered, and the current domestic research on transmedia narrative mainly focuses on the story-centered type. Shi Chang (2022) believes in *Symbiosis: Transmedia Narrative as a Method* that the premise of transmedia narrative is "symbiosis", and the necessary condition for the establishment of the story world lies in the "scalability" of history, geography, characters and other dimensions, and its expansion methods include filling gaps in history, exploring unknown territories, and supplementing the experiences of characters.

## 2.3 A review of research on the fan economy

Zhang Chang (2010) defined the "fan economy" as "taking emotional capital as the core, using the fan community as the marketing means to increase emotional capital, the fan economy takes consumers as the protagonist. Based on the consumer's emotions, the company leverages its power to achieve the goal of adding emotional capital to the brand and the icon". Cai Qi (2015) believes that the fan economy around media content has been upgraded from the traditional "text production-consumption" model to "multi-dimensional model of IP development and operation". And in the new IP operation model, the position of fans in the economic industry chain is being front-loaded and their status has also been upgraded. Tu Junyi (2023) believes that in IP operation, what is used to mobilize the fan economy is the emotion attached to the fan object, which prompts fans to migrate between different media products with media content.

At present, the research of scholars at home and abroad has affirmed that film spin-offs are very meaningful to the film industry, which is also an important reason for the research in this paper. But the current study ignores the target audience of film spin-offs. In fact, the essence of film spin-offs is fan economy, and the current research does not start from the emotions of consumers, take cross-media narrative theory as the main perspective, and take emotional capital as the core to study how to develop film spin-offs.

## 2.4 Questions

Therefore, from the perspective of fan economy and combined with transmedia storytelling theory, this article attempts to answer the following question: why did the spin-offs of "The Wandering Earth 2" become the highest record of crowdfunding of film and television spin-offs in China? Why are consumers more willing to spend for it? How does consumer emotional capital play a role in this?

## 3 Method

This study used a questionnaire method to develop the research around the above questions.

### 3.1 Hypothesis established

Based on the above question, the hypothesis is presented here:

H1: The closer the spin-off is to the core value of the movie, the more it will trigger fans' recognition of the product.

H2: The more spin-off is restored, the more they will trigger fans' recognition of the product.

H3: The closer the spin-off is to the core value of the movie, the more it will arouse the love of fans.

H4: The more restored the spin-off, the more it will arouse the love of fans.

H5: The more fans love spin-offs, the stronger their willingness to buy.

H6: The higher the recognition of spin-offs by fans, the stronger their willingness to buy.

### 3.2 Questionnaire design

This study takes "The Wandering Earth 2" as a typical case analysis, so the audience who like the film "The Wandering Earth 2" is selected as the research object. Questionnaires are distributed through a combination of online and offline way. To be specific, they are distributed through WeChat Moments, QQ Space, Weibo, Xiaohongshu, Questionnaire Star Sample Library and offline distribution.

The questionnaire includes the following parts, starting with the confirmation of basic information, including gender, age, education, occupation, and income. The second is the dimension reduction statement part of the independent variables, which are the value core closeness of the spin-off and the restoration degree of the content spin-off. And the value core of spin-offs is concretized into the solidarity, collectivism, responsibility, internationalism, and sci-fi optimism shown in "The Wandering Earth 2". Finally, there is the dimension reduction statement part of the dependent variable, which is the recognition and love of fans for content spin-offs. The data collection, collation and analysis process of this survey was completed on April 9, 2023.

### 3.4 Sample descriptive analysis

A total of 245 questionnaires were collected in this questionnaire, of which 200 respondents had seen the "The Wandering Earth 2" movie, 182 respondents had paid attention to the spin-offs of "The Wandering Earth 2", and 139 respondents had purchased the spin-offs of "The Wandering Earth 2", so the valid questionnaire was 139.

Through a descriptive analysis of the respondents who have seen the movie "The Wandering Earth 2", it is found that the average fan love for this movie is 4.48 points. The movie is relatively popular with the audience. Through a descriptive analysis of respondents who have not paid attention to the spin-offs of "The Wandering Earth 2", it is found that the main reason why respondents did not pay attention to the spin-off products of this movie is that they have not heard of it, and the main reason why they have not purchased it is "dislike".

## 4 Research Findings and Discussion Points

### 4.1 Correlation analysis of "The Wandering Earth 2" spin-offs survey data

The closer the spin-off is to the core value of the movie, the more it will trigger fans' recognition of the product. Through Pearson correlation analysis, the correlation between the recognition of spin-offs and the closeness of spin-offs and the core proximity of film value found that the correlation coefficient  $r=0.478$ ,  $P<0.01$ , so there was a significant positive correlation between the two variables, and the research hypothesis was supported by H1.

This shows that the higher the degree of restoration of spin-offs, the more it will trigger fans' recognition of the product. In the analysis of the correlation between the restoration degree of spin-offs and the recognition of spin-offs, it is found that the correlation coefficients  $r=0.470$  and  $P<0.01$  are therefore significantly positively correlated between the two variables, and the research hypothesis is supported by H2.

Similarly, the closer the spin-off is to the core value of the movie, the more it will trigger fans' love for the product. Pearson correlation analysis on the correlation between the proximity of spin-offs and film value core and product liking found that the correlation coefficients  $r=0.483$ ,  $P<0.01$ , so there was a significant positive correlation between the two variables, and the research hypothesis that H3 was

supported.

The higher the degree of restoration of spin-offs, the more it will arouse fans' love for the product. After analyzing the correlation between the restoration of content from spin-offs and the audience's liking for the product, we found that the correlation coefficient  $r=0.395, P<0.01$ . Therefore, there is a significant positive correlation between the two variables, indicating that the research hypothesis H4 is supported. In addition, there is a significant positive correlation between fan love and recognition of spin-offs and their purchase intentions, and the research hypothesis is also supported by H5 and H6.

Therefore, this study believes that fans' love and recognition of spin-offs are necessary elements for the purchase intention of film content spin-offs, and the degree to which content spin-offs are close to the core of film value and the degree of restoration of movies will affect fans' love and recognition of products. For "The Wandering Earth 2", the spin-offs show the values of technical optimism and solidarity expressed in the film, and are very restored in image and material, in line with the iconic style and characteristics of the film, which enhances the degree of love and recognition of fans, thereby significantly affecting fans' willingness to buy.

#### **4.2 Reason: the quality of the viewing experience affects the audience's willingness to purchase spin-offs**

The film content spin-offs industry is a kind of fan economy, and the development of content spin-offs mobilizes the emotions attached to the movie, so as to realize the migration of fans from movies to spin-offs. Recognition and liking are important emotional dimensions, fans' recognition and love for the movie will be migrated to the spin-off, because the spin-off contains the value and image conveyed by the film, at this time the fans buy not a simple commodity, but the core idea of the film contained in the content spin-off and their own experience of the movie.

According to the transmedia storytelling theory, film spin-offs bring consumers an immersive experience, and when the images in the film enter the real world and people's daily lives, the audience can be immersed in the movie story through spin-offs. The official authorized spin-off crowdfunding of "The Wandering Earth 2" selects the most distinctive characters in the movie: artificial intelligence MOSS, digital life's cards and the most popular character of the dynamic omniterrain guardian system BENBEN, transferring the audience's love for the movie to the product, and at the same time the restoration of image and material enhances the audience's recognition, thereby improving the psychological value of the audience, thus setting a record of more than 100 million crowdfunding in 9 days.

#### **4.3 Analysis of the current situation: there are multiple problems in the transformation from content to spin-offs**

First of all, spin-offs have not been preceded to the planning stage of the film. The publicity is not enough. And the spin-offs industry is not mature. The development of film spin-offs is a link in the film industry chain, but at present, China's film industry does not attach importance to the development of film spin-offs, and the source of income only stays at the theater box office and video software playback, and the value of IP is far from being realized. The survey found that the main reason for not paying attention to the content spin-offs of "The Wandering Earth 2" is "not heard", and the reason for not buying spin-offs in the survey is not only "dislike", but missing the crowdfunding time is also a relatively large

reason. The official authorized spin-off of "The Wandering Earth 2" reached the crowdfunding target of 100,000 yuan in 1 minute, and the crowdfunding amount exceeded 100 million yuan in 9 days, in order to ensure the timely delivery of the product, the producer stopped crowdfunding in advance on February 1. At the same time, according to an exclusive interview with Liu Chang, an investment partner of Transwarp Manufacturing, by the Beijing News, the earliest batch of the crowdfunding was delivered in June this year, and the last batch was delivered in mid-November this year. These data are a positive signal for the domestic film content spin-offs industry and even the domestic film industry. However, due to the immature connection between the licensing, production, and sales of domestic film spin-offs, and there is no process framework in terms of the number and time of specific development, the spin-offs of "The Wandering Earth 2" still lag behind the period of the highest movie popularity, and the trading of its spin-offs still has room for development.

Second, there is no strict quality control for spin-offs. On March 14, SCIFI Space, the official producer of the "Wandering Earth 2" content spin-off, released a sample photo of the "the digital life's card" USB flash drive, which showed that the aluminum alloy material body announced during the crowdfunding period was changed to zinc alloy material, changing the gray-black color during the crowdfunding to gray-white, and fans have left messages saying that the sample has a "strong sense of plastic" and "The goods is different from the confirmed samples", which caused consumer anger. Finally, under pressure from many parties, SCIFI Space said that it would change the materials and designs announced at the crowdfunding time and open a refund channel. Since the actual results of crowdfunding far exceed the goal, either focusing on the image and the material or the benefit, merchants choose the latter in order to deliver in time. But in fact, the primary factor that consumers consider for the purchase of spin-offs is not practicality, but appearance and the value contained, so arbitrary changes in appearance and degradation of quality will lead to a decrease in the psychological value of consumers for the spin-off.

It is worth mentioning that the audience may have confrontational interpretations. In "The Wandering Earth 2", some fans think that the character "Ma Zhao" is similar to OCE's Seagull doll, and other fans have responded, so with the popularity of the movie, the popularity of "Ma Zhao Seagull" related content in online spin-off creations has gradually increased, and fans have produced many "Ma Zhao Seagull" fan works. According to consumer choice theory, in order to compensate for the restoration of one unit of official spin-offs, consumers need to get more fan works, so fan works have a substitution effect on official spin-offs. But fan preferences and psychology are also a source of inspiration for official spin-offs, and brand OCE seized the opportunity to cooperate and released the first official "Ma Zhao Seagull" image on April 12. At present, with the gradual development of digitalization, fans' preferences for the movie spin-offs they love will be presented to businesses through the Internet, and merchants can adjust the development direction of content spin-offs in time according to the behavior of fans.

#### **4.4 Implications for increasing fans' willingness to purchase spin-offs**

Through the investigation of the spin-offs of "The Wandering Earth 2" and the summary of the current status of fans' purchase intentions lead to the following insights.

First, film spin-offs should convey the core value of the film. Each film has its own unique value core, and the spin-offs of the film must be consistent with the core values expressed in the film. And the plot and character design in the film are injected into the spin-offs, so that consumers can recall the plot in the movie and the feelings when consuming when they see the spin-off products, and enhance the

immersion of the audience to interact with it. At the same time, with the value of the film as the main keynote, it can also expand the story to a certain extent, dig deep into the details that a movie cannot fully show, and promote the construction of a more comprehensive film world.

Second, film spin-offs should reflect the image in the movie. When consumers buy spin-offs, the primary consideration is not practicality, but the degree of restoration. Therefore, the degree of restoration of the image design in the film by content spin-offs is very important and should be placed in the first place in design development. In the development stage, the copyright owner and the licensee should do a good job of strict control of the degree and quality of restoration, whether it is the image, the material, and even the style characteristics should be consistent with the content of the film, so as to mobilize the emotions of fans, improve the psychological value of fans, and enhance the willingness to buy.

Third, the development of film content spin-offs should be placed in the planning stage of the film. The creator of the film should set the memory points for the audience when planning the film, and the planner should also consciously think about the possibility of commercializing various elements in the story, and dig deep into the value of the film story. According to the characteristics of the film, the spin-off products are designed and developed purposefully and systematically. And the design, production, distribution and other links are advanced to synchronize with the film, build a complete process framework, improve production efficiency, match the most popular period before and after the release of the film, and maximize the value of spin-offs.

Fourth, maximize publicity and ensure the smooth flow of information and sales channels. In the new media era, the promotion of film spin-offs can integrate multiple online and offline channels, synchronize the promotion of posters, premieres, roadshows and other methods used in traditional film promotion with new media platforms such as online Weibo and Douyin short videos, and combine with authorized "linkage" with other brands for cross-border marketing to create a greater marketing momentum.

Fifth, pay attention to the emotional connection with fans. At present, fans are increasingly becoming "production consumers" in the true sense, not only consumers of film spin-offs, but also providing valuable and free feedback on market trends and market preferences for producers, and being able to directly participate in the production of spin-offs. Therefore, the connection between fans and movie spin-offs is not a one-way connection, but a constant interaction and collaboration. Therefore, fans should be encouraged to participate in and invest in the development of spin-off products, always pay attention to the preferences and emotional needs of fans, so as to guide their willingness to consume, and enhance the further emotional connection between the audience and the film in the process of participation and continuous emotional needs being satisfied.

## 5. Summary and Reflection

This study through the perspective of transmedia storytelling and fan economy, uses the questionnaire survey method to study the reasons why "The Wandering Earth 2" content spin-offs have become the highest record of crowdfunding of film and television spin-offs in China. It is found that fans' love and recognition of spin-offs are necessary elements of their purchase intention, and the degree to which film content spin-offs are close to the connotation of film value and the degree of restoration of movies will significantly affect their love and recognition of spin-offs.

In short, in the future development, content spin-offs should focus on conveying the value of the film, restoring the image in the film, and need to put the development process in front to ensure the



smooth flow of information and sales channels, and pay attention to the emotional connection with fans, which provides inspiration for the development of China's film spin-offs industry. However, this study takes questionnaire survey as the research method, only from the perspective of the audience, in the research of content spin-offs development, it is necessary to consider the licensing, research and development, channels, pricing and other aspects of the product itself, and the film spin-offs industry should be put into the overall planning and improvement of the entire film industry.

## References

- [1] Henry Jenkins (2006). *Convergence Culture*, NYU Press.
- [2] Sangkil Moon & Reo Song (2021) Green-lighting scripts in the movie pre-production stage: An application of consumption experience carryover theory, *Journal of Business Research*, 140(3) DOI:10.1016/j.jbusres.2021.11.004
- [3] Aaron Gazley& Gemma Clark& Ashish Sinha (2011) Understanding preferences for motion pictures, *Journal of Business Research*, 854-861.
- [4] Charles A. Lubbers PhD & William J. Adams (2004) Merchandising in the Major Motion Picture Industry, *Journal of Promotion Management*, 10:1-2, 55 -63, DOI: 10.1300/J057v10n01\_05
- [5] John Fiske (1992) The Cutlural Economy of Fandom, *The Adoring Audience: Fan Culture and Popular Media*, edited by Lisa A. Lewis, 256. New York. Routledge.
- [6] Henrik Bødker.(2016).Stuart Hall's encoding/decoding model and the circulation of journalism in the digital landscape. *critical Studies in Media Communication* (5). doi:10.1080/15295036.2016.1227862.
- [7] Tu, J. Y.. (2023).Three paths of audience migration across media in the IP emotional economy. *Youth Journalist* (02), 111-113. doi:10.15997/j.cnki.qnjz.2023.02.011.(in Chinese)
- [8] Shi Chang. (2022). Commuality: Transmedial narratives as method. *Studies in Art* (03), 119-131.(in Chinese)
- [9] Si Ruo & Zhao Lu. (2021). From symbols to mimesis: Exploring the value of spin-offs of Chinese mythology-themed animated films. *Contemporary Animation* (03), 31-39.(in Chinese)
- [10] Kan Qian & Fu Wenya. (2017). A study of cross-media narratives in the context of media convergence - from audience participation in content production of Internet intellectual property. *Sight & Sound* (09), 96-97. doi:10.19395/j.cnki.1674-246x.2017.09.053.(in Chinese)
- [11] Cai, Ti. (2015). The fan economy model in the era of social networking. *China Youth Studies* (11), 5-11. doi:10.19633/j.cnki.11-2579/d.2015.11.001.(in Chinese)
- [12] Jing-Yu Pei. (2015). Analysis of industrial status and development mode of movie spin-offs in China. *China Film Market* (11), 22-25.(in Chinese)
- [13] Zhang, Qiang. (2007). The power of fans is great. *IT Manager World* (15), 87-89.(in Chinese)
- [14] Yoyo Ding. (2023). From flow products to spiritual products: A study on improving the core competitiveness of Chinese movie spin-offs. *Audiovisual* (01), 80-83. doi:10.13994/j.cnki.stj.2023.01.040.(in Chinese)